List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 11 (Cancelled).

12. (New) A method for optimizing emission of broadband transmission pulses of a pulse echo method, comprising the steps of:

transmitting transmission pulses with a preselected pulse repetition frequency (TAKT); and

switching the polarity of a pulse with each cycle of the pulse repetition frequency (TAKT), depending on a random sequence (PNCode).

13. (New) The method as claimed in claim 12, wherein:

the pulse repetition frequency (TAKT) is constant.

14. (New) The method as claimed in claim 12, wherein:

the pulse repetition frequency (TAKT) is additionally jittered.

15. (New) The method as claimed in claim 12, wherein:

the pulse form of the transmission pulse is of any shape.

16. (New) A method for optimizing emission of broadband transmission pulses of a pulse echo method, comprising the steps of:

transmitting transmission pulses with a preselected pulse repetition frequency (TAKT); and

suppressing individual pulses with each cycle of the pulse repetition frequency (TAKT), depending on a random sequence (PNCode).

17. (New) The method as claimed in claim 16, wherein:

the pulse repetition frequency (TAKT) is constant.

18. (New) The method as claimed in claim 16, wherein:
the pulse repetition frequency (TAKT) is additionally jittered.

19. (New) The method as claimed in claim 16, wherein:
the pulse form of the transmission pulse is of any shape.

20. (New) A circuit for optimizing emission of broadband transmission pulses of a pulse echo method, comprising:
two transmission signal generators (Senders A, B) of differing polarity, between whose output signals switching occurs back and forth, depending on a produced, random sequence (PNCode).

21. (New) A circuit for optimizing emission of broadband, transmission pulses of a pulse echo method, comprising:
two transmission signal generators (Senders A, B) of differing polarity, which are switched in and out, depending on a produced, random sequence (PNCode).

22. (New) A circuit for optimizing emission of broadband transmission pulses of a pulse echo method, comprising:
a transmission signal generator (Sender C) which can be switched in its polarity and which is switched, depending on a produced, random sequence (PNCode).

23. (New) The circuit as claimed in claim 20, wherein:
the random sequence (PNCode) is a PN-code sequence produced by a PN-code generator circuit.

24. (New) The circuit as claimed in claim 23, wherein:
said PN-code generator circuit comprises a multi-stage, shift register (Q1-Qn) having feedback taps.

25. (New) The circuit as claimed in claim 24, further comprising:

an XOR-gate for the feedback taps.

26. (New) The circuit as claimed in claim 21, wherein:

the random sequence (PNCode) is a PN-code sequence produced by a PN-code generator circuit.

27. (New) The circuit as claimed in claim 26, wherein:

said PN-code generator circuit comprises a multi-stage, shift register (Q1-Qn) having feedback taps.

28. (New) The circuit as claimed in claim 27, further comprising:

an XOR-gate for the feedback taps.

29. (New) The circuit as claimed in claim 22, wherein:

said PN-code generator circuit comprises a multi-stage, shift register (Q1-Qn) having feedback taps.

30. (New) The circuit as claimed in claim 29, wherein:

said PN-code generator circuit comprises a multi-stage, shift register (Q1-Qn) having feedback taps.

31. (New) The circuit as claimed in claim 30, wherein:

said PN-code generator circuit comprises a multi-stage, shift register (Q1-Qn) having feedback taps.